

AMENDED CLAIMS

In the International Office filed on 31 August 2000 (31.08.00);
original claims 1-17 replaced by amended claims 1-17 (3 pages)

1. Device for avoiding sleep disturbances due to noise and other sounds with two sound-insulating earplugs (10, 12) at least one of which comprises an integrated radio receiver (14, 16) with a means for the conversion of radio signals received from a radio station (18) to audio signals, characterized in that the radio station (18) is connected to at least one means (36) which picks up specific snoring sounds in order to emit, on reception of the specific snoring sounds, a radio signal which can be received by the radio receiver (14, 16) and converted to an audio signal.
2. Device according to claim 1, characterized in that the radio signal after conversion in the radio receiver (14, 16) represents snoring sounds as an audio signal.
3. Device according to claim 1 or 2, characterized in that in addition at least one alarm-generating means (24 to 34) and/or at least one means (36) which picks up further specific sounds is connected to the radio station.
4. Device according to any of claims 1 to 3, characterized in that the earplug (10, 12) is made of silicone or silicone-like material which is molded or foamed individually in the outer ear and in which the radio receiver (14, 16) with the means for the conversion of radio signals received from the radio station (18) to audio signals is integrally cast or foamed or fitted exchangeably.

Changed Sheet (Article 19)

5. Device according to any of claims 1 to 4, characterized in that the means for the conversion of radio signals received from the radio station (18) to audio signals is a diaphragm.
6. Device according to any of claims 1 to 5, characterized in that the nature of the audio signals, in particular the volume, can be adjusted beforehand.
7. Device according to any of claims 1 to 6, characterized in that the audio signals reproduce the alarm and/or the sound identically.
8. Device according to any of claims 1 to 7, characterized in that the alarm-generating means (24 - 34) and/or means which picks up sounds (36) is connected directly or by radio to the radio station (18).
9. Device according to any of claims 1 to 8, characterized in that the alarm-generating means (24 - 34) and/or means which picks up sounds (36) is integrated in the radio station (18).
10. Device according to any of claims 1 to 8, characterized in that the sound-producing or alarm-generating means is a digital or analog clock (22) with an alarm function.
11. Device according to any of claims 1 to 10, characterized in that the sound-producing or alarm-generating means is a telephone (28), a doorbell station (30), a baby monitoring device (32), a smoke alarm (34) or the like device which triggers an audio alarm.
12. Device according to any of claims 1 to 11, characterized in that the sound-producing or alarm-generating means is the receiving part (26) of a movement detector (24).

Changed Sheet (Article 19)

13. Device according to any of claims 1 to 12, characterized in that the means which picks up sounds (36) is a microphone.
14. Device according to any of claims 1 to 13, characterized in that between the means which picks up sounds (36) and the radio station (18) is arranged a means for recognition of the sounds picked up (38) and in that by means of recognition only certain sounds which can be specified beforehand are transmitted from the radio station (18) to the radio receiver (14, 16).
15. Device according to claim 14, characterized in that the means for recognition of the sounds picked up (38) is a hardware-assisted and/or software-assisted speech or snoring recognition system.
16. Device according to any of claims 1 to 15, characterized in that the device can be used by several users simultaneously, wherein each user has two sound-insulating earplugs (10, 12) and in at least one of the earplugs (10, 12) is integrated a radio receiver (14, 16) with a means for the conversion of radio signals received from a radio station (18) to audio signals.
17. Device according to claim 16, characterized in that, by the means for recognition of the sounds picked up (38), it can be specified beforehand to which user of the device a particular sound picked up is to be transmitted.